ESTER INDUSTRIES LTD.

Product Data Sheet
ESTOPLAST XU230NN05
[PA6-GF] Compound

Product Description

Polyamide 6 - Glass Fiber Reinforced, 30%

Product Applications

Automotive: Plug & Socket, Switch Parts, Handle, and Grab Handle

Electrical & Electronic: MCB, RCCB, Rotor Switch, Relay, Inverter Parts and Terminal Block

General

Material Status	• Commercial : Active
Filler/Reinforcement	• Glass Fiber reinforcement , 30%
Forms	• Pellets
Additive	• Mold Release
Appearance/Color	• Natural
Processing Method	• Injection molding

Physical	Typical Value	Unit	Test Method
Specific Gravity	1.37	-	ASTM D - 792
Water Absorption Saturation, 23°C Equilibrium, 23°C, 50%RH	 6.0 0.95	 % %	ISO-62

Mechanical	Dry	Unit	Test Method
Tensile Stress (Break)	130	MPa	ASTM D-638
Tensile Strain (Break)	4.0	%	ASTM D-638
Flexural Strength	200	MPa	ASTM D-790
IZOD Impact Strength (23°C) Notch	 135	 J/m	 ASTM D-256A

Thermal	Dry	Unit	Test Method
Heat Deflection Temperature 0.45 MPa Unannealed 1.8 MPa Unannealed	 215 205	 °C °C	 ASTM D-648 ASTM D-648

Flammability	Dry	Unit	Test Method
Flammability Classification 1.50mm	 HB		 UL-94
Electrical	**Dry**	**Unit**	**Test Method**
Volume Resistivity	$>10^{13}$	Ohm-cm	ASTM D-257
Dielectric Strength (2mm)	27	KV/mm	ASTM D-149

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Injection Molding – XU230NN05

Drying Conditions

Drying Time(hour)	Temperature	Remarks
3-4	85-90^{o}C	Temperature should not be more than 90^{o}C to avoid discoloration Moisture content after drying should be <0.2% Avoid sudden cooling of dry pellet

Injection Molding Temperatures (^{o}C)				
Mold	Melt	Nozzle	Centre	Feed zone
55 – 80	240 – 265	235 -260	235 -255	230-240

Physical form and storage

ESTOPLAST XU is supplied in pellet form. It should be pre-dried as per the guideline mentioned above prior to molding. Standard packing size is 25kg. In order to prevent moisture pick up and contamination, supplied packaging should be kept closed and undamaged.

Product Safety

ESTOPLAST XU is thermally stable up to 350^{o}C and does not give rise to hazardous material due to degradation or evolution of gases and vapors. ESTOPLAST XU decomposes above 350^{o}C and gives carbon dioxide and water on charring.
For more information on safety, refer individual product MSDS. Available on request.

Note

All information supplied in this publication is based on our current knowledge and experience. The data provided fall within the normal range of product properties and relate only to the specific material designed. The data provided should not be used to establish specification limits or used alone as the basis of design. ESTER assumes no liability and makes no warranties of any kind, expressed or implied, whatsoever in respect of application, processing or use made of aforementioned information or product.